

LISTING OF CLAIMS

1. (Currently Amended) A graphical user interface for a process control system that includes a plurality of data inputs and a variety of alarms for said data inputs, the interface comprising:

~~simultaneous display of multiple alarms wherein the each of alarm displays a~~
main panel display including a plurality of alarm indicators, wherein each of the alarm
indicators includes a visual representation of an active alarm for a data input from
one or more of a control module, an equipment module, or a processing unit and
provides indicia of alarm priority and alarm age; and

an alarm profile display providing contextual information corresponding to a
selected one of the plurality of alarm indicators, wherein the contextual information
includes (1) another alarm indicator to which the selected alarm indicator is a parent.

2. (Currently Amended) The interface of claim 1 wherein the main panel
display is simultaneously viewable with the alarm profile display. ~~each of the alarm~~
~~displays comprises contextual information about the alarm, the interface further~~
~~comprising simultaneous display of indicia of all other active alarms in at least one of~~
~~a common control module, a common equipment module or a common process unit.~~

3. (Original) The interface of claim 1 further comprising a listing of all
active alarms along with alarm age profiles for each active alarm.

4. (Original) The interface of claim 3 wherein the listing of all active alarms is divided into at least one of common control modules, common equipment modules or common process units.

5. (Original) The interface of claim 4 wherein the listing of all active alarms comprises a total active alarm listing and at least three sub-categories of alarms divided by one of common control modules, common equipment modules or common process units.

6. (Currently Amended) The interface of claim 1 further comprising a plurality of different operator definable display alerts for augmenting the plurality of alarm indicators ~~simultaneous display of multiple alarms~~.

7. (Currently Amended) The interface of claim 6 wherein one type of display alert ~~[[that]]~~ comprises setting a target display alert for a target range for a process variable wherein the target display alert may begin immediately or after a delay and continue indefinitely or for a limited time and the target display alert provides an alarm when the target range is achieved or when the target range is not achieved within a preselected time period.

8. (Original) The interface of claim 6 wherein one type of display alert that comprises setting a range display alert for a desired value range for a process variable wherein the range display alert may begin immediately or after a delay and

continue indefinitely or for a limited time and the range display alert provides an alarm when the process variable falls outside of the desired value range.

9. (Original) The interface of claim 6 wherein one type of display alert comprises setting a ramp display alert for a desired accumulated value for an output process variable wherein the ramp display alert provides an alarm when the actual accumulated value for the output process variable approaches and exceeds the desired accumulated value.

10. (Currently Amended) The interface of claim 1 wherein the plurality of alarm indicators are color-coded ~~alarms are color-coded~~ to provide an indication of alarm priority and alarm age.

11. (Currently Amended) The interface of claim 1 ~~further comprising a details wherein the alarm profile display for each alarm comprising the selected alarm includes additional~~ information about the active alarm and ~~information about other alarms active in the same control module.~~

12. (Currently Amended) The interface of claim 11 further comprising parent control objects, wherein the main panel display and the alarm profile display are navigable to provide ~~and means to navigate displays providing more~~ information about the parent control objects.

13. (Original) The interface of claim 1 wherein the interface is adaptable for PDA or handheld devices.

14. (Original) The interface of claim 6 further comprising summary displays for a plurality of the display alerts and the current status of all display alerts.

15. (Original) The interface of claim 1 further comprising hierarchical alarm profile displays indicating where and when a heaviest alarm activity is occurring.

16. (Original) The interface of claim 1 comprising graphical displays of active alarm counts vs. alarm age profiles.

17. (Original) The interface of claim 16 wherein the alarm profiles may be defined by at least one of time span, plant area, process unit and equipment modules.

18. (Currently Amended) ~~The A-graphical user interface of claim 1 for a process control system that includes a plurality of data inputs and a variety of alarms for said data inputs, the interface comprising:~~

~~simultaneous display of multiple alarms wherein the each of alarm displays provide indicia of alarm priority and alarm age,~~

the alarm profile display including a plurality of alarm profiles wherein active
alarms are grouped by at least one or more of time span, plant area, process unit and equipment module, and

wherein the alarm profiles ~~[[being]]~~ are super imposable on a process graphic display so that alarm profiles can be seen in the spatial context of equipment schematics depicted in the process graphic display.

19. (Currently Amended) ~~A machine readable medium having instructions stored thereon that, when executed, causes a machine with at least one monitor to:~~

A method for generating ~~generate~~ a graphical user interface for a process control system that includes a plurality of data inputs and a variety of alarms for said data inputs, the interface including method comprising:

displaying a main panel display including a plurality of alarm indicators,
~~simultaneous display of multiple alarms wherein [[the]]~~ each of the alarm displays indicators includes a visual representation of an active alarm for a data input from one or more of a control module, an equipment module, or a processing unit and
provides ~~indicia~~ of alarm priority and alarm age,

~~each of the alarm displays comprising contextual information about the alarm,~~
~~the interface further comprising simultaneous display of indicia of all other active~~
~~alarms of at least one of a common control module, a common equipment module or~~
~~a common process unit,~~

displaying an alarm profile display in response to selecting an alarm indicator
from the main panel display, the alarm profile display providing contextual
information corresponding to the selected alarm indicator, wherein the contextual
information includes another alarm indicator to which the selected alarm indicator is
a parent, the alarm profile display including a plurality of alarm profiles wherein

active alarms are grouped by ~~at least one~~ or more of time span, plant area, process unit and equipment module, and

superimposing the alarm profiles ~~being super-imposable~~ on a process graphic display so that the alarm profiles can be seen in the spatial context of equipment schematics depicted in the process graphic display.

20. (Currently Amended) The ~~machine-readable-medium~~ method of claim 19 further comprising simultaneously displaying the main panel display and the alarm profile display upon selecting the alarm indicator ~~having instructions stored thereon that, when executed, causes the machine to display a plurality of different operator definable display alerts for augmenting the simultaneous display of multiple alarms.~~